

PROCESSING COPY *OK*

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law

25X1

S E C R E T

COUNTRY	Hungary	REPORT	
SUBJECT	Hungarian Air Force Communications Equipment	DATE DISTR.	8 OCT 1957
		NO. PAGES	3
		REQUIREMENT NO.	RD
DATE OF INFO.		REFERENCES	25X1
PLACE & DATE ACQ.			25X1

SOURCE EVALUATIONS ARE DEFINITIVE APPRAISAL OF CONTENT IS TENTATIVE.

1. [] report on the 23 OCT 1957
communications equipment of the Hungarian Air Force. The following is [] 25X1
[] the significant parts of the report. *UCT 3 1 1957*

2. Every large Hungarian Air Force base was equipped with type P-20 ("Token") radar. *1 NOV 1957*
The smaller bases were equipped with P-8 radar apparatus. Type P-20 sets were
in use at Kecskemet, Kiskunlachaza, Szeged, and Tosza. In Budapest there was *8 COM*
an air defense operations center. In view of the presence of radar equipment
at every airbase, the aircraft "scrambled" from the base for interception *1 NOV 1957*
purposes could be guided by their own base. The radar also permitted
navigation back to the base. *8 COM*

3. Communications between the bases could be carried out by means of radio-
telephony or radio-telegraphy, radio-telex, line-telex, and line-telephony.
Most in use were communications apparatus of the R-50 type (capacity $1\frac{1}{2}$ KW,
frequency range 2.75 - 15 Mc/s, modulation A 1, A 2, and A 3; hookups for
Hellschreiber and telex) and type R-40 (capacity 100 watt, frequency range 20 Mc/s,
modulation A 1, A 2, and A 3; and hookup for Hellschreiber). Radio
telegraphy was keyed by a bug. The telex apparatus used was the Siemens 52.
For communications on a higher level use was made of a Soviet beam or unidirectional
transmitter. All telegraphic traffic was in code. *u/mels*

4. Every base had a navigation beacon, type RSO (long wave?). There were some
indications that "Tacan" apparatus was used. As far as is known, the MIG-17's
were not equipped with "homing" apparatus. Nothing is known of any automatic
homer or fixer system at the bases.

5. The UKW-6 is the communications apparatus in the MIG-15 and the MIG-17. The
UKW-250 is the ground to air communications apparatus.

a. Specifications of the UKW-6: frequency range 100 - 150 Mc/s, power 26 volts,
4 channels, capacity 6 watts, headphone with throat microphone.

b. The UKW-250: frequency range: 100 - 150 Mc/s, power 220 volts, 4 channels,
capacity 250 watts, crystal controlled. The UKW-250 is built into an 8-ton

S E C R E T					
STATE	X ARMY	X NAVY	X AIR	X FBI	AEC

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

25X1

INFORMATION REPORT INFORMATION REPORT

Incls. attached
Please route

S E C R E T

25X1

-2-

truck (see attachment).

6. The crystals for the UKW-250 and the UKW-6 were provided with a code indicator. The users did not know the frequencies. The frequency was determined according to the following formula:

$$\text{Frequency} = \frac{N - 1}{12} + 100 \quad (N \text{ is the cipher on the crystal}).$$

7. There was a UHF-apparatus in use with the Hungarian Air Force. Mention was also made of a Russian 24-channel UHF set

25X1

→ 8. The MIG-17 was equipped with a nose radar and a tail-warning radar.

9. The UKW-250 is a crystal-controlled transmitter and was used in the ground-to-air communications with the MIG-15 and the MIG-17. The frequency range was from 100 to 150 Mc/s. There were four interchangeable crystals in the transmitter. The capacity was 250 watts. Frequency change was effected by means of an electro-mechanical installation which was put into operation by means of push buttons. The switch-over from one frequency to another took 10 seconds. The transmitter with the receivers and appurtenances were built into an 8-ton truck, type ZIS, model 151. Every such truck had three antennas: transmitter antenna, frame aerial, and the antennas for the receivers. Voltage was supplied by a generating set of 1.5 KVA, 220 V switch. The station operated on 220/380 v.

25X1

S E C R E T

25X1

25X1

Page Denied

Next 4 Page(s) In Document Denied